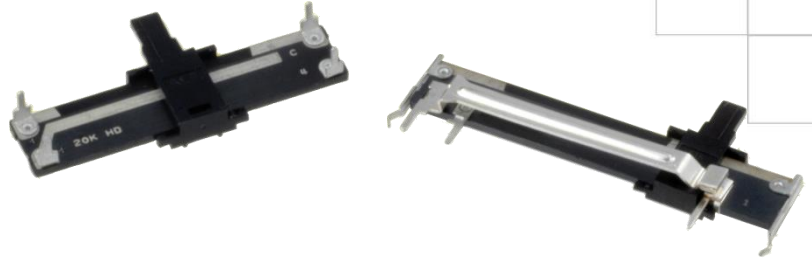


# Series 448

## Commercial Linear Motion

### Carbon Composition Slide Potentiometer

- 10-60mm slider travel
- Innovative AC power switch (SPST, SPDT)
- Center detent available
- Single or dual element designs
- Economical
- Wide resistance range
- Slim construction
- RoHS compliant



#### Description

The versatile 448 Series provides the designer with a thin construction and multiple mounting options. As a standard construction, the 448 series is available with the actuator parallel or perpendicular to PC board. Options include various actuator lengths, terminal styles, resistance values, and travel options to meet your design requirements.

#### Ordering Information

Series	Mounting Style	Travel	Actuator Style	Resistance Code Examples	Resistance Tolerance	Taper	Specials	
448	U	E	2	102	B	D	N	
	↓		↓	↓	↓	↓	↓	
<b>Code</b>	<b>Spec.</b>	<b>U &amp; X Mounting</b>			<b>Code</b>	<b>Spec.</b>	<b>Code</b>	<b>Spec.</b>
U	Actuator parallel to PC board	2 - Style A	9.5mm		A	±10%	N	No specials
X	Actuator perpendicular to PC board	3 - Style B	4.0mm		B	±20%	S	SPST power switch (20 & 30mm X type only)
V	Actuator (Low profile) perpendicular to PCB (mono only)	4 - Style C	5.0mm		C	±30%	D	SPDT power switch (20mm X type and 9.5mm actuator only)
	↓	<b>V Mounting</b>		<b>Code</b>	<b>Resistance</b>			
		1 - Style D	3.35mm	501	500 ohms			
				102	1K			
				502	5K			
				103	10K			
				104	100K			

## Electrical Specifications

Parameter	Conditions & Remarks		Min.	Max.	Unit	
Resistance Range	Linear (Audio - consult CTS)		500	1 Meg	ohms	
Resistance Tolerance	±30%, ±20%, ±10%					
Insulation Resistance	at 250 VDC		10 Meg		ohms	
Maximum Operating Voltage	Taper	10mm	15mm 20mm	30mm	45mm	60mm
	Linear	100VDC	150VDC 200VDC	250VDC	300VDC	500VDC
	Non-linear	50VDC	50VDC 150VDC	200VDC	250VDC	300VDC
Power Rating, watts	Taper	10mm	15mm 20mm	30mm	45mm	60mm
	Linear	0.05w	0.1w	0.2w	0.25w	0.5w
	Non-linear	0.025w	0.05w	0.1w	0.15w	0.25w

## Mechanical and Environmental

Power Switch (optional)	SPST	10,000 cycles carrying 1,000 watts 120 VAC (Tungsten-filament)
	SPDT	10,000 cycles carrying 600 watts 120 VAC (Tungsten-filament)
Slide Travel (without switch)	X and U Style: 10, 15, 20, 30, 45, and 60mm V Style: 10, 15, 25, 40 and 55mm	
Slide Travel (with switch)	30mm= 27mm electrical+3mm switch (SPST only) 20mm= 17mm electrical+3mm switch	
Power Switch (optional)	SPST	10,000 cycles carrying 1,000 watts 120 VAC (Tungsten-filament)
	SPDT	10,000 cycles carrying 600 watts 120 VAC (Tungsten-filament)
Operating Force	Potentiometer: 20-150g Switch: 100-500g	
Stop Strength	3 Kgf maximum, measured at base of slider	
Operating Life	Standard: 10,000 cycles Special:100,000, 250,000 cycles	
Reflow Soldering	Maximum temperature of 260°C for 5 seconds	
RoHS	Lead-Free. Fully compliant to RoHS Directive	
Packaging :	Standard sample box packaging	
Operating Temperature Range	-40 °C to +85 °C	

# Mechanical Specifications

Figure 1 – 448V Mono

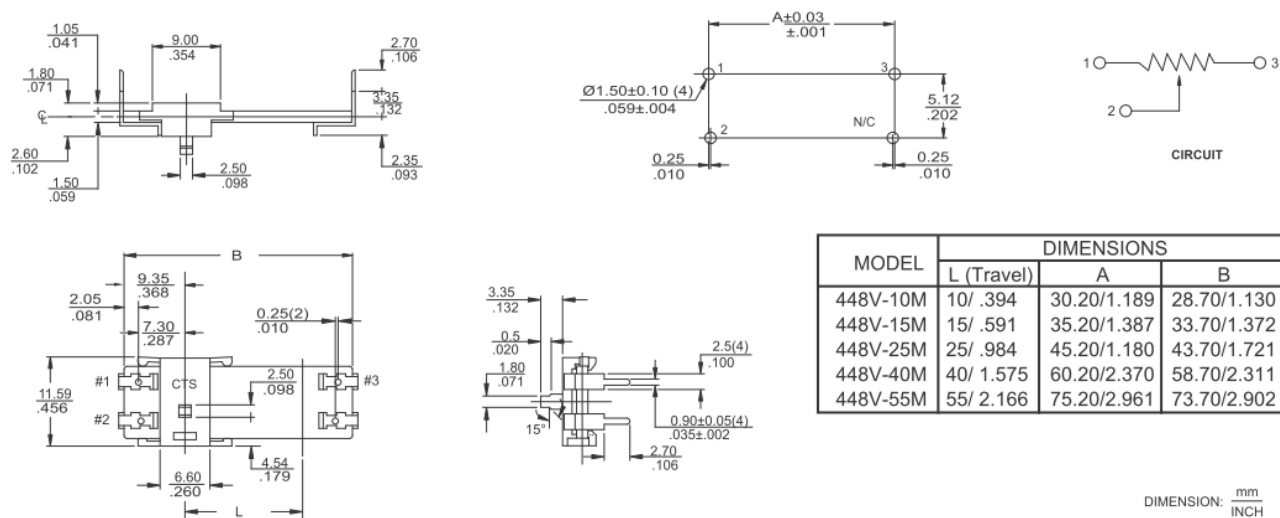


Figure 2 – 448U Mono

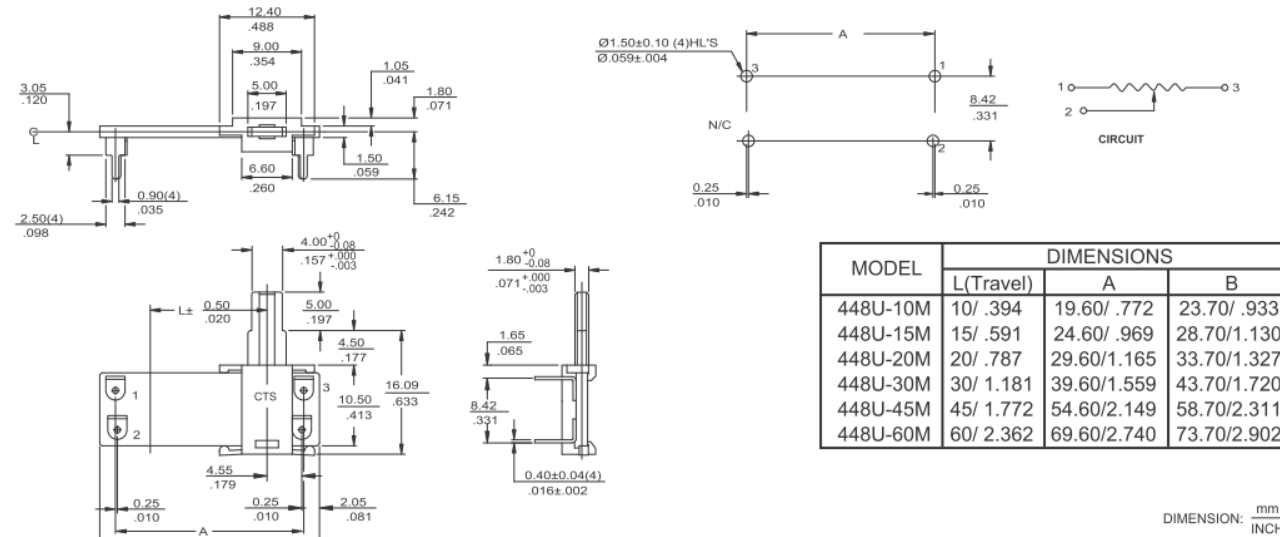


Figure 3 – 448U Dual

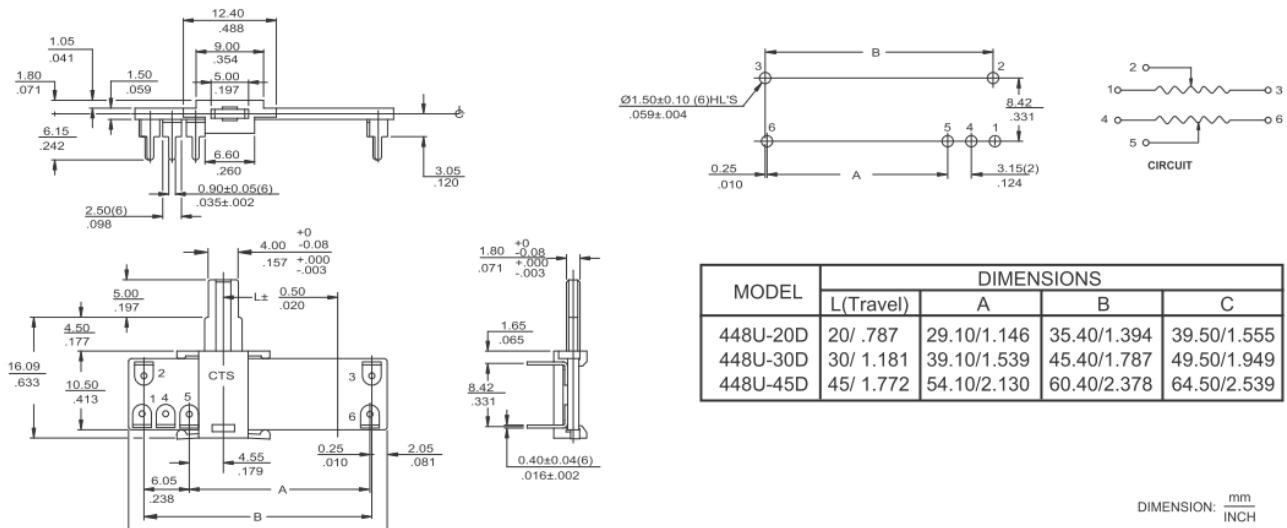


Figure 4 – 448X Mono

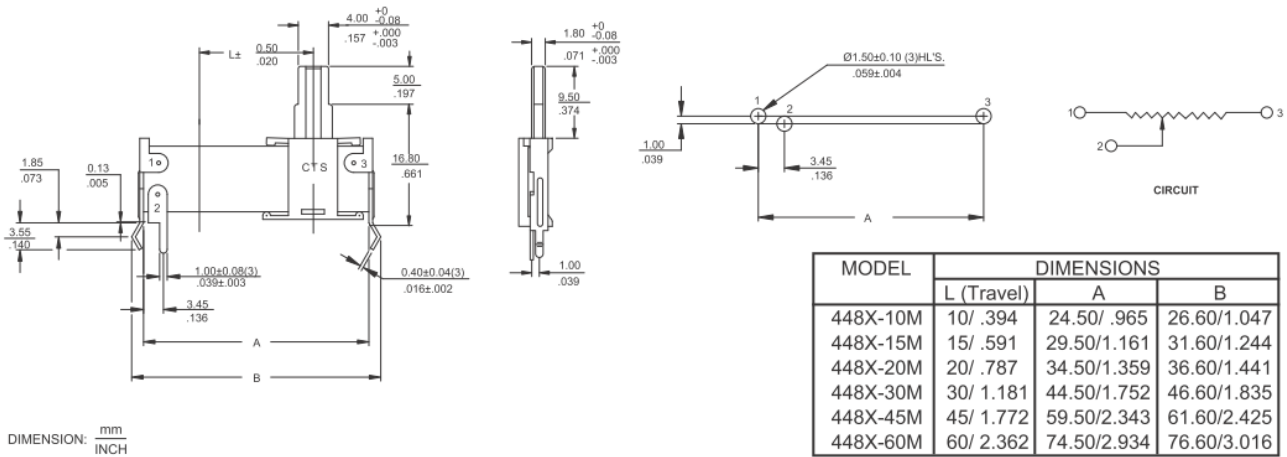


Figure 5 – 448X Dual

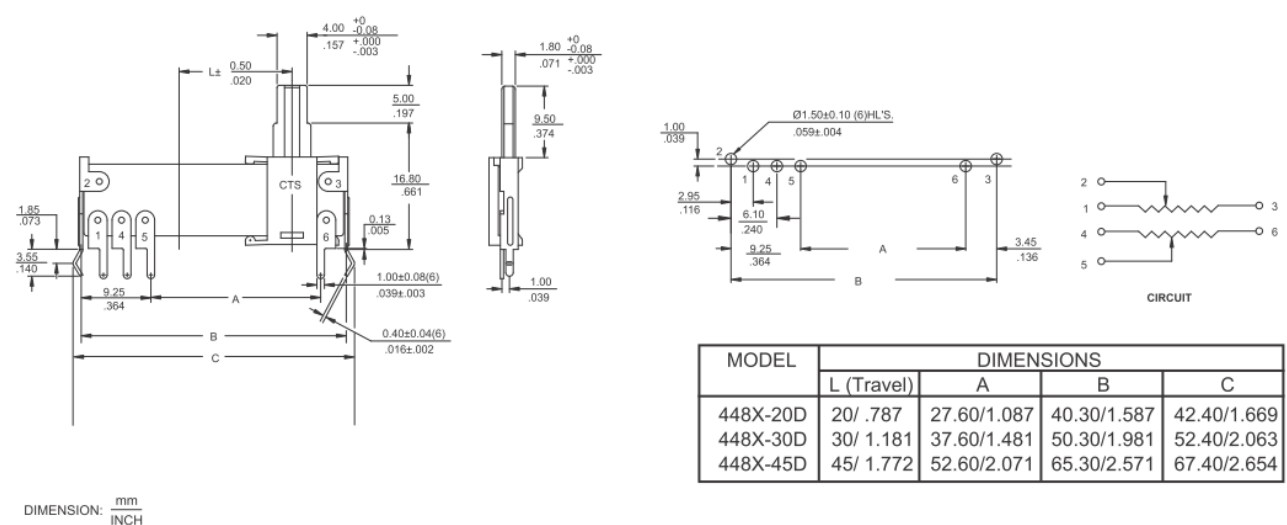


Figure 6 – 448X Mono W/SPST Switch

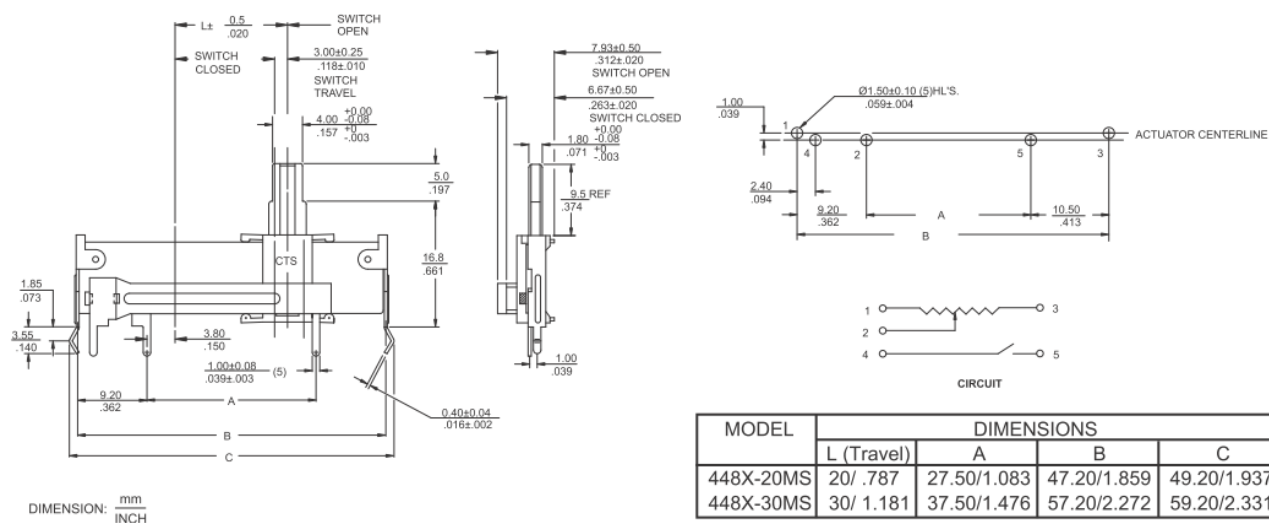
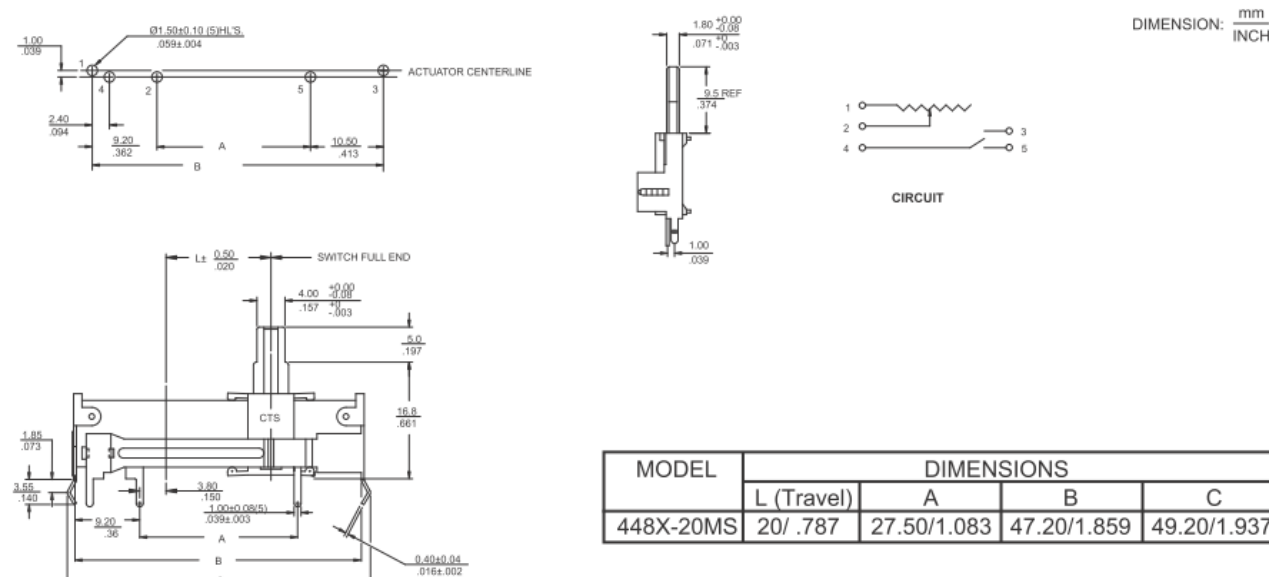


Figure 7 – 448X Mono W/SPDT Switch (with style A actuator only)



### 448 Series Actuator Styles

